

Improved Trace Video Filtering Using Wavelet De-noising Techniques

ABSTRACT

5 A filter that includes an analyzer, thresholding circuit, and synthesizer. The analyzer generates a low-frequency component signal and a high-frequency component signal from an input signal. The thresholding circuit generates a processed high-frequency signal from the high-frequency component signal, the processed high-frequency signal having an amplitude of zero in those regions in which the high-frequency component signal has an amplitude that is less than a threshold value. The synthesizer generates a filtered signal from input signals that include the low-frequency component signal and the processed high-frequency signal. The filtered signal is identical to the input signal if the threshold value is zero. The analyzer is preferably constructed from a plurality of finite impulse response filters that operate on a small fraction of the input signal at a time.

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